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UNION PACIFIC RAILROAD COMPANY

R. L. (RICK) EADES
Director Environmental Field Operations
W.E. (BILL) ROE
Director Track Maintenance – Safety

Directors Environmental Field Operations
B. A. (BROCK) NELSON – Northern Region
L. A. (LANNY) SCHMID – Western Region
G. (GLENN) THOMAS – Southern Region

Environmental Protection
Omaha, NE

January 7, 2000

Mr. Kenneth V. Herstowski, P.E.
USEPA
RCRA Corrective Action & Permits Branch
Air, RCRA and Toxics Division
901 North 5th Street
Kansas City, KS 66101

Dear Mr. Herstowski:

Please refer to the Proposed Administrative Order on Consent (the Order) for the Omaha, Nebraska Shops of the Union Pacific Railroad Company. More specifically, the site is described as 9th and Cass Streets, Omaha, Nebraska, RCRA I.D. No. NED000829754. During discussions between EPA and Union Pacific regarding the site, the concept of separating the site into operable units was devised. It was further agreed that work under the Order could proceed with the initial unit, which is Operable Unit 1. Operable Unit 1 is that portion of the site the City of Omaha will initially purchase from Union Pacific and develop.

The Union Pacific is endeavoring to maintain its schedule for investigation and remediation of the site to accommodate the City of Omaha's plans for development. In order to satisfy the schedule Union Pacific has developed, the Union Pacific wishes to furnish EPA with three copies of the draft Corrective Measures Study (CMS) for OU1 for review at this time. This document is dated December 1999. Please review the draft CMS and furnish me with your comments at your earliest convenience. One additional copy of the draft CMS is being transmitted to you for forwarding to the RCRA Section of the Nebraska Department of Environmental Quality (NDEQ). The Railroad's understanding

is that EPA will forward all documents to NDEQ for their review and request they provide EPA with comments.

In order to prepare the Omaha Shops site for development in a timely and cost-effective manner, the Union Pacific wishes to obtain the approval of EPA for completing Interim Measures at three locations in the Omaha Shops. The first location of work is located in OU1 near the westerly portion of the site. The work at this location encompasses removing and disposing of asbestos contaminated soil. The next two locations of work are located in OU2. The second location of work is SWMU 14, which is the Paint Barrel Pits. The proposed work includes excavating contaminated soils and disposing of them. The third location of work is SWMU 20, which is the Acetylene Sludge Pits. At this location, we propose to excavate contaminated soils and remediate them. Our desire is to coordinate the work contemplated in the three Interim Measures with work we propose to complete for petroleum contamination in the southern portion of the site. The petroleum contamination work encompasses removing hydrocarbon contaminated soil and incinerating it on-site and also removing free product from groundwater while the excavation is open. Approval for this work is being sought from the NDEQ.

To assist you in reviewing our request to conduct the three Interim Measures noted above, I have included for your use three copies each of the following documents.

1. Planning Memorandum - Asbestos Area Interim Measures, January 3, 2000.

2. Planning Memorandum - Paint Barrel Pits Interim Measures, January 3, 2000 (SWMU 14).

3. Planning Memorandum - Acetylene Sludge Pits Interim Measures, January 3, 2000 (SWMU 20).

The goal of Union Pacific is to conduct the Interim Measures work in April 2000. We truly appreciate your effort in reviewing our request so that the schedule may be maintained. If you wish to call me to discuss any aspect of the work please contact me at (402) 271-3675.

Yours truly,

Jeffrey D. McDermott

Jeffrey D. McDermott, P.E.
Mgr. Environmental Site Remediation

ENC

C: Theodore L. Huscher - NDEQ (W/ENC)
Norman Jackman - City of Omaha (W/ENC)
C. Dale Jacobson - Jacobson Helgoth (W/ENC)
Denny Brown - UPRR
Jeff Smith - URSGWC

SUBJECT: **Acetylene Sludge Pits Interim Measures**

DATE: January 3, 2000

PROJECT: Omaha Shops RCRA Facility Investigation
Union Pacific Railroad Company
Omaha, Nebraska

This planning memorandum has been prepared for the Union Pacific Railroad Company (UPRR) by URS Greiner Woodward Clyde (URSGWC). The memorandum summarizes interim measures (IM) activities planned for the Acetylene Sludge Pits located at the Omaha Shop facility. The Omaha Shops facility is located north of downtown Omaha near 9th and Webster Streets as shown on Figure 1. The location of the Acetylene Sludge Pits is shown on Figure 2.

Field activities described in this memorandum are planned to start on or about April 1, 2000.

Purpose

The purpose of the planned IM activities is to reduce concentrations of potential contaminants in the soil at the referenced site, in anticipation of future development on the Omaha Shops property. The scope of planned activities includes removing contaminated soils and disposing of them. The proposed IM activities are based on the findings of previous site investigations.

Site Backgrounds

The North and South Acetylene Sludge Pits are located north of the Grace Street Tank and Pumphouse (AOC 13) at the north end of the Omaha Shops facility. UPRR representatives believe that disposal in the Acetylene Pits was discontinued in 1972. Disposal of a "white substance, possibly a waste product" was identified in a 1941 aerial photograph in the locations now occupied by the North and South Acetylene Sludge Pits. These areas of white material are visible in all subsequent aerial photographs of the site. Historical aerial photographs also show areas of standing liquid on and around the areas of white material. The area is now covered with a fine gray powder. The Acetylene Sludge Pits are surrounded by an earthen berm but are accessible to the public.

Current Investigation Activities

Six test pits were excavated and sampled for chemical analysis in January 1999. Three test pits were dug in each of the two sludge pits. The purpose of the trenching and soil sampling activities was to collect chemical data and to estimate the horizontal and vertical extent of the pits. The estimated sizes of the Acetylene Sludge Pits, based on the test pits, are listed below:

- North Pit: 130 feet by 170 feet and about 6 feet deep.
- South Pit: 90 feet by 110 feet and about 8 feet deep.

Interim Measures Approach

Impacted materials will be excavated, treated on site using soil incineration technology, and replaced in the site excavation. Confirmation soil samples will be collected following the procedures described below. All field activities will be completed in accordance with the Omaha Shops Health and Safety Plan and with the Standard Operating Procedures in the Quality Assurance Project Plan. The following actions will be taken as part of the IM for this site.

1. A utility clearance will be completed at each site prior to the start of the IM activities.

2. The soil incineration unit will be brought to the site and assembled for use.

3. Field activities will be completed following procedures specified in the Omaha Shops Health and Safety Plan. It is anticipated that the majority of the fieldwork will be done using level D personal protective equipment. The Health and Safety Plan will be modified as necessary to address the activities described in this planning memorandum. Particular attention will be paid to safety procedures for work around heavy equipment.

4. The sludge material within the pits will be excavated down to native soils (about 6 to 8 feet below ground surface) using a backhoe or other heavy equipment. Excavation activities will then continue about 1-foot into the native soils. The planned lateral limits of the excavation are based on the analytical results for subsurface soil samples collected in January 1999. Figure 2 shows the known extent of the pits. Initial excavation activities will continue until all of the sludge material has been removed based on visual observations and soil headspace results.

5. Excavated sludge from the Acetylene Sludge Pits will be transported to a staging area and temporarily stored on and covered with plastic until treated by incineration.

6. Confirmation soil samples will be collected from the sidewalls and bottoms of the excavations and analyzed for TCLP VOCs. The confirmation sample analytical results will be used to verify that remaining soils do not exceed the TCLP VOC criteria.

7. Confirmation soil samples will be collected from the backhoe bucket using a stainless-steel spoon. The sample material will be placed directly into a laboratory-cleaned sample container.

8. Sampling equipment will be decontaminated prior to use at each sampling location using an Alconox water wash and clean water rinse.

9. Sample material will be placed in the appropriate container, labeled, packaged in a cooler with ice, and shipped to Test America Inc. (formerly NET) for chemical analysis.

10. Sampling locations will be documented in the field logbook and the extent of any excavated areas will be marked and surveyed.

11. Excavated areas will be fenced off and left open following removal of the contaminated sludge.

12. Compare confirmation soil sample results to TCLP VOC criteria. If results exceed TCLP VOC criteria, continue excavation activities followed by re-collection of confirmation samples in newly excavated area. Continue this procedure until all confirmation sample concentrations are below the TCLP VOC criteria.

13. Treated (incinerated) soil material will be used to backfill the Acetylene Sludge Pits. The soils will be compacted in the excavations to minimize future settling.

Design Plans and Specifications

Design plans and specifications will be prepared prior to IM implementation. Specifications and/or drawing notes will include, but not be limited to, the following:

1. Before starting excavation activities, submit copies of all permits, licenses, and authorizations including, but not limited to, licenses of waste transporters and waste disposal facilities.
2. Prior to the start of excavation activities, communicate with the Owner and local representatives concerning the location of utilities including, but not limited to, oil, gas, electric, telephone, communications, water, and sewer. The location and type of utilities that may be present in the area are not completely shown on the Drawings.
3. Install fencing or concrete barricades around excavation areas to prevent unauthorized access before starting excavation. Provide and maintain barricades with warning lights during excavation activities until excavation is backfilled.
4. Take all necessary precautions to assure no damage occurs to existing structures or appurtenances that may be affected by work activities. Any damage resulting from the Contractor's operations shall be repaired at no expense to the Owner.
5. Clear excavation sites of objectionable materials and debris. Designate noncontaminated material not salvaged for reuse on-site as spoiled and dispose of material in accordance with State and local requirements.
6. All excavation sideslopes must conform to safety requirements specified by Federal, State, and local government regulations.
7. Excavation includes removal and subsequent handling of materials excavated or otherwise handled in the performance of the work.

8. Remove visually contaminated soils. The Engineer will collect soil headspace samples to evaluate potential for soil contamination.
9. Haul contaminated soil material to the soil processing area and temporarily store on and under plastic sheeting. Designated soils from the Acetylene Sludge Pits will be treated in an incinerator.

   Stockpile non-designated soil near the excavation. Non-designated soil is potentially clean material that must be excavated to reach contaminated soil. The Engineer will collect soil headspace samples to evaluate potential for soil contamination.

   The location of the non-designated soil stockpile must be approved by the Owner and Engineer prior to the start of excavation activities.

10. Transport and dispose of waste in accordance with Federal, State, and local laws and regulations.
11. Incinerator Contractor will treat excavated material to concentrations defined in the issued permit(s).
12. After excavation is complete to design limits, the Engineer will collect soil samples to verify that the treated soils are below Universal Treatment Standards. Soil samples will be analyzed using rapid-turnaround VOC analysis by Method 8260.
13. The Engineer will direct additional excavation to remove contaminated soil, if necessary, based on results of confirmatory soil testing from the excavation bottom and sidewalls.
14. Upon notification from Engineer, immediately backfill the excavation(s).
15. Backfill the excavation using treated (incinerated) soil and stockpiled non-designated soil. The treated (incinerated) backfill will not be ready for use until treatment has been completed.
16. Place backfill material into excavations in 8-inch (maximum) loose lifts.
17. Compact backfill as much as practical using heavy equipment.
18. At completion of work at each location, remove equipment, unused materials, temporary facilities, debris, and miscellaneous items resulting from or used during construction. Restore site, as nearly as possible, to original conditions.
19. Submit copies of completed manifests and certificates of disposal indicating quantities of the various wastes and materials accepted for disposal.

Operation and Maintenance Plan

An operation and maintenance plan is not anticipated since the materials will be treated (incinerated) on-site and replaced in the excavation.

Interim Measures Implementation Schedule

The anticipated IM schedule is shown on Figure 3.

TABLE 1

ESTIMATED ACETYLENE SLUDGE PITS SAMPLING BREAKDOWN
UPRR OMAHA SHOPS FACILITY

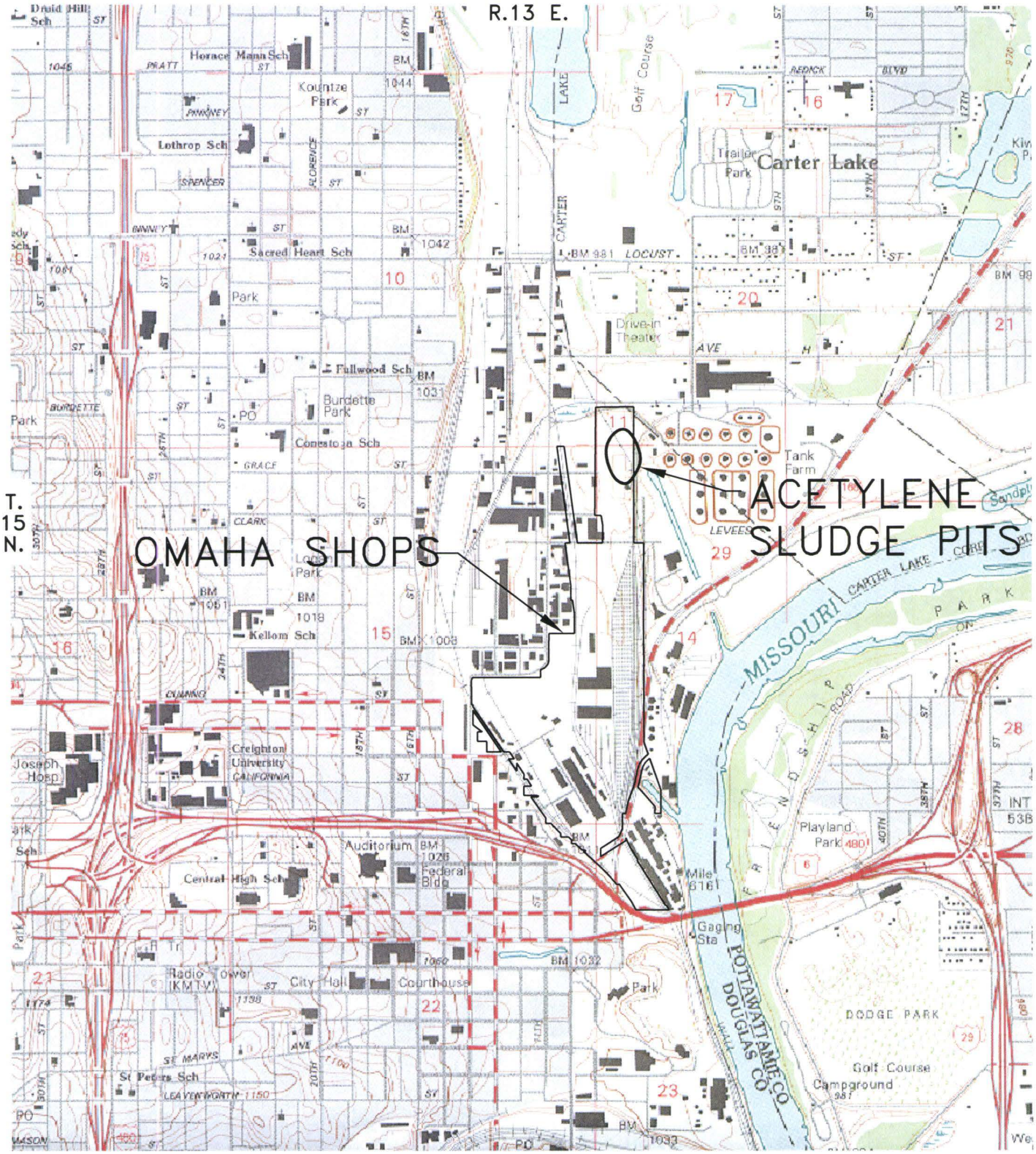
ANALYTICAL METHOD	PARAMETER	NO. OF FIELD SAMPLES	NO. OF FIELD REPLICATES	NO. OF MS/MSD SAMPLES	TOTAL NO. OF SAMPLES
Soil					
8260	VOCs	8	1	1/NA	10

NA = Not Applicable

TABLE 2

SAMPLE CONTAINERS, PRESERVATION, AND HOLDING TIMES UPRR OMAHA SHOPS FACILITY

ANALYTICAL METHOD	PARAMETER	CONTAINERS PER SAMPLE	MINIMUM SAMPLE SIZE	PRESERVATION	HOLDING TIME
Soil					
8260	VOC	Two 4-oz VOA jars with Teflon-lined lids	10 grams	4° C	14 days



BASE MAP SOURCE: USGS 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE MAP OF OMAHA NORTH, NE.–IA., 1994.

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OMAHA SHOPS LOCATION

UNION PACIFIC

OMAHA SHOPS
UNION PACIFIC RAILROAD COMPANY

URS Greiner Woodward Clyde

DRN BY DAP	DATE 12/15/99	PROJECT NO. 45-091MC204.04	FIG. NO. 1
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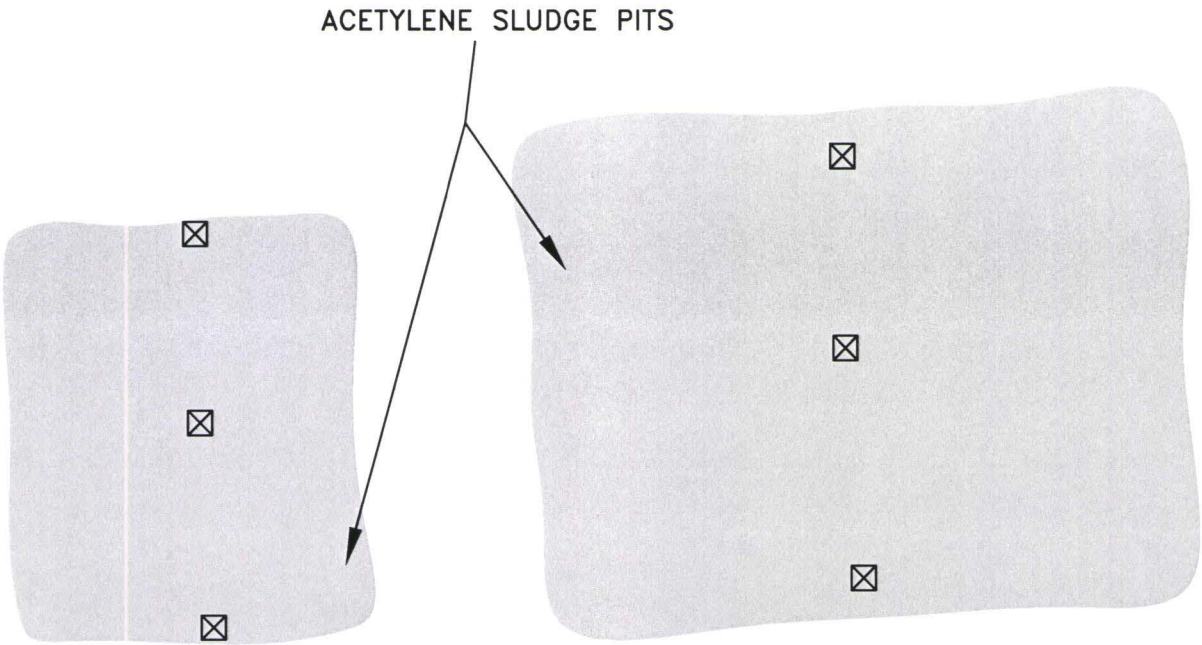
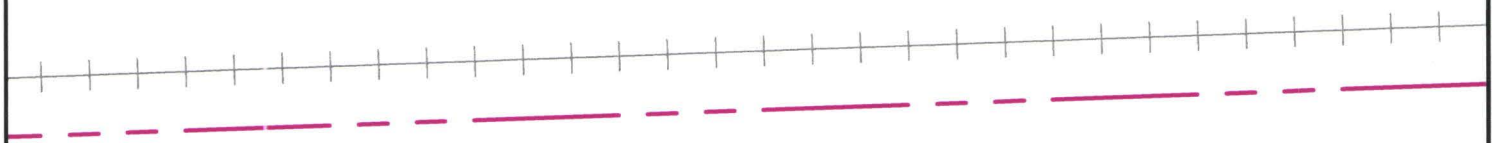
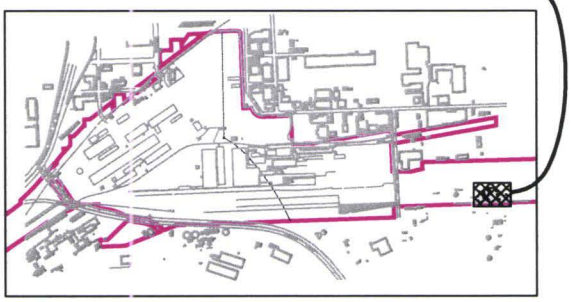




ACETYLENE SLUDGE PITS



KEY PLAN

50 25 0 50

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☒ PREVIOUS TRENCH SOIL SAMPLE

PROPERTY LINE

November 30, 1999 2:17:26 p.m.
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Xrefs: uprrpropline.DWG DRILLHOLES.DWG

SWMU 20-ACETYLENE SLUDGE PITS
SITE PLAN

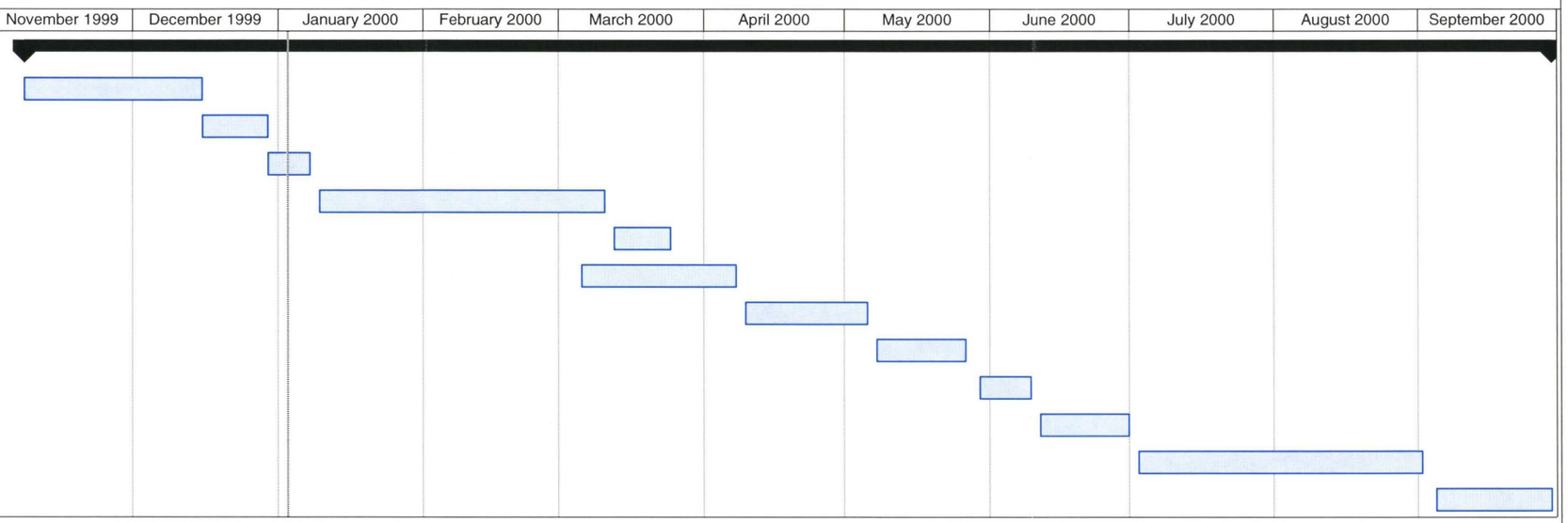
OMAHA SHOPS
UNION PACIFIC RAILROAD COMPANY

URS Greiner Woodward Clyde

DRN BY DAP	DATE 12/15/99	PROJECT NO. 45-091MC204.04	FIG. NO. 2
CHK'D BY .	REVISION .		

FIGURE 3
UPRR OMAHA SHOPS
IM PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**Acetylene Sludge Pits**	**327 days**	**Mon 11/8/99**	**Fri 9/29/00**
2	Internal Draft Planning Memo	38 days	Mon 11/8/99	Wed 12/15/99
3	UPRR Review	14 days	Thu 12/16/99	Wed 12/29/99
4	Draft Planning Memorandum	9 days	Thu 12/30/99	Fri 1/7/00
5	EPA Review	61 days	Mon 1/10/00	Fri 3/10/00
6	Final Planning Memorandum	12 days	Mon 3/13/00	Fri 3/24/00
7	Procurement	33 days	Mon 3/6/00	Fri 4/7/00
8	Field Work	26 days	Mon 4/10/00	Fri 5/5/00
9	Internal Draft Report	19 days	Mon 5/8/00	Fri 5/26/00
10	UPRR Review	11 days	Tue 5/30/00	Fri 6/9/00
11	Draft Report	19 days	Mon 6/12/00	Fri 6/30/00
12	EPA Review	61 days	Mon 7/3/00	Fri 9/1/00
13	Final Report	25 days	Tue 9/5/00	Fri 9/29/00



Project: Aspimf3
Date: Mon 1/3/00

Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary
Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks

SUBJECT: **Paint Barrel Pits Interim Measures**

DATE: January 3, 2000

PROJECT: Omaha Shops RCRA Facility Investigation
Union Pacific Railroad Company
Omaha, Nebraska

This planning memorandum has been prepared for the Union Pacific Railroad Company (UPRR) by URS Greiner Woodward Clyde (URSGWC). The memorandum summarizes interim measures (IM) activities planned for the Paint Barrel Pits located at the Omaha Shop facility. The Omaha Shops facility is located north of downtown Omaha near 9th and Webster Streets as shown on Figure 1. The location of the Paint Barrel Pits is shown on Figure 2.

Field activities described in this memorandum are planned to start on or about April 1, 2000.

Purpose

The purpose of the planned IM activities is to reduce concentrations of potential contaminants in the soil at the referenced site, in anticipation of future development on the Omaha Shops property. The scope of planned activities includes removing contaminated soils and disposing of them. The proposed IM activities are based on the findings of previous site investigations.

Site Background

The Paint Barrel Pits area was identified from historical facility blueprints in the 1990 Environmental Assessment (HDR 1990). The two Paint Barrel Pits were located in an area measuring 150 feet long by 21 feet wide (Figure 2). Former records described this area as being near the intersection of 12th and Izard Streets. This area has not been used since 1985 (HDR 1990).

A total of six soil borings were completed in the Paint Barrel Pits area during the 1990 Environmental Assessment. The borings were spaced evenly through the apparent center of the old pits, as identified on historical blueprints. An area composite sample was collected for total metals, volatile organic compounds (VOCs), extraction procedure (EP) Toxicity, and semivolatile organic compounds (SVOCs) analyses. VOCs were not detected in the soil. However, numerous SVOCs were present at concentrations exceeding industrial media-specific screening levels (MSSLs) including benzo(a)anthracene (25 mg/kg), chrysene (24 mg/kg), benzo(b)fluoranthene (19 m/kg), and benzo(b)pyrene (20 mg/kg). Antimony and lead were also detected at concentrations of 480 mg/kg and 7,800 mg/kg, respectively, which exceeded industrial MSSLs. The lead EP toxicity concentration was 41 mg/L which exceeds the 5 mg/L standard.

Junk fill, wood, asphalt, wire, brass machine parts, asbestos, cinders, sand, gravel and traces of clay were observed in the borings from the 0 to 5 foot depth interval. Two borings were extended to a depth of 10 feet. Dark gray, silty clay was encountered at 8 feet. A strong creosote odor was noticed at the four boreholes closest to Izard Street with organic vapor analyzer (OVA) readings of 10 to 400 units.

Current Investigation Activities

Three test trenches were excavated and two soil borings were drilled at the Paint Barrel Pits in January 1999. Soil samples were collected for chemical analysis from the trenches and borings. The trenching and sampling activities were completed to collect chemical data and to estimate the horizontal and vertical extent of the pits. Only one trench was sampled for chemical analysis due to sloughing soils preventing collection of representative soil samples. The sloughing problems were attributed to the high water table. COPCs were detected at all of the sample locations. The estimated sizes of the Paint Barrel Pits, based on the trenching and soil borings, are listed below.

- West Pit: 30 feet by 120 feet and about 7 feet deep.
- East Pit: 30 feet by 90 feet and about 7 feet deep.

Interim Measures Approach

Impacted materials will be excavated and disposed, and the excavation backfilled with clean soil. Confirmation soil samples will be collected following the procedures described below. All field activities will be completed in accordance with the Omaha Shops Health and Safety Plan and with the Standard Operating Procedures in the Quality Assurance Project Plan. The following actions will be taken as part of the IM for this site.

1. A utility clearance will be completed at each site prior to the start of the IM activities.

2. Field investigation activities will be completed following procedures specified in the Omaha Shops Health and Safety Plan. The majority of the fieldwork is expected to be completed using level D personal protective equipment. The Health and Safety Plan will be modified as necessary to address the activities described in this planning memorandum. Particular attention will be paid to safety procedures around heavy equipment.

3. The soil/debris material within the pits will be excavated down to native soils (about 6 to 8 feet below ground surface) using a backhoe or other heavy equipment. Excavation activities will then continue about 1-foot into the native soils. The planned lateral limits of the excavation are based on the analytical results for subsurface soil samples collected in January 1999. Figure 2 shows the known extent of the pits. Initial excavation activities will continue until all of the soil/debris material has been removed based on visual observations and soil headspace results.

4. Excavated materials from the Paint Barrel Pits will be loaded and transported to the designated disposal site.

5. Confirmation soil samples will be collected from the sidewalls and bottoms of the excavations and analyzed for TCLP VOC and metals analysis. The confirmation sample analytical results will be used to verify that remaining soils do not exceed TCLP criteria.

6. Confirmation soil samples will be collected from the backhoe bucket using a stainless-steel spoon. The sample material will be placed directly into a laboratory-cleaned sample container.

7. Sampling equipment will be decontaminated prior to use at each sampling location using an Alconox water wash and clean water rinse.

8. Sample material will be placed in the appropriate container, labeled, packaged in a cooler with ice, and shipped to Test America Inc. (formerly NET) for chemical analysis.

9. Sampling locations will be documented in the field logbook and the extent of any excavated areas will be marked and surveyed.

10. Excavated areas will be fenced off and left open following removal of the contaminated material.

11. Compare confirmation soil sample results to TCLP criteria. If results exceed TCLP criteria, continue excavation activities followed by re-collection of confirmation samples in newly excavated area. Continue this procedure until all confirmation sample concentrations are below the TCLP criteria.

12. Backfill the excavations with "clean" fill soils brought onto the site. The soils will be compacted in the excavations to minimize future settling.

Design Plans and Specifications

Design plans and specifications will be prepared prior to IM implementation. Specifications and/or drawing notes will include, but not be limited to, the following:

1. Before starting excavation activities, submit copies of all permits, licenses, and authorizations including, but not limited to, licenses of waste transporters and waste disposal facilities.
2. Prior to the start of excavation activities, communicate with the Owner and local representatives concerning the location of utilities including, but not limited to, oil, gas, electric, telephone, communications, water, and sewer. The location and type of utilities that may be present in the area are not completely shown on the Drawings.

3. Install fencing or concrete barricades around excavation areas to prevent unauthorized access before starting excavation. Provide and maintain barricades with warning lights during excavation activities until excavation is backfilled.
4. Take all necessary precautions to assure no damage occurs to existing structures or appurtenances that may be affected by work activities. Any damage resulting from the Contractor's operations shall be repaired at no expense to the Owner.
5. Clear excavation sites of objectionable materials and debris. Designate noncontaminated material not salvaged for reuse on-site as spoiled and dispose of material in accordance with State and local requirements.
6. All excavation sideslopes must conform to safety requirements specified by Federal, State, and local government regulations.
7. Excavation includes removal and subsequent handling of materials excavated or otherwise handled in the performance of the work.
8. Remove visually contaminated soils. The Engineer will collect soil headspace samples to evaluate potential for soil contamination.
9. Haul contaminated soil material, based on headspace results and visual observations, to the soil storage area and temporarily store on and under plastic sheeting. Contaminated soil will be loaded and transported to the designated disposal site.

   Stockpile non-designated soil near the excavation. Non-designated soil is potentially clean material that must be excavated to reach contaminated soil. The Engineer will collect soil headspace samples to evaluate potential for soil contamination.

   The location of the non-designated soil stockpile must be approved by the Owner and Engineer prior to the start of excavation activities.

10. Transport and dispose of waste in accordance with Federal, State, and local laws and regulations.
11. Contractor shall properly manifest each load of waste material that is transported off site for disposal.
12. After excavation is complete to design limits, the Engineer will collect soil samples to verify that the performance standards have been achieved. Soil samples will be analyzed using rapid-turnaround VOC analysis by Method 8260 and total metals by Method 6010.
13. The Engineer will direct additional excavation to remove contaminated soil, if necessary, based on results of confirmatory soil testing.
14. Upon notification from Engineer, immediately backfill the excavation(s).
15. Backfill the excavation using clean fill material from an off-site source.
16. Place backfill material into excavations in 8-inch (maximum) loose lifts.
17. Compact backfill as much as practical using heavy equipment.

18. At completion of work at each location, remove equipment, unused materials, temporary facilities, debris, and miscellaneous items resulting from or used during construction. Restore site, as nearly as possible, to original conditions.

19. Submit copies of completed manifests and certificates of disposal indicating quantities of the various wastes and materials accepted for disposal.

Operation and Maintenance Plan

An operation and maintenance plan is not anticipated since the materials will be removed for off-site disposal and the excavation filled with clean material.

Interim Measures Implementation Schedule

The anticipated IM schedule is shown on Figure 3.

TABLE 1

ESTIMATED PAINT BARREL PITS SAMPLING BREAKDOWN
UPRR OMAHA SHOPS FACILITY

ANALYTICAL METHOD	PARAMETER	NO. OF FIELD SAMPLES	NO. OF FIELD REPLICATES	NO. OF MS/MSD SAMPLES	TOTAL NO. OF SAMPLES
Soil					
8260	VOC	4	1	1/NA	6
6010/7000 series	Total Metals[1]	4	1	1/NA	6

NA = Not Applicable

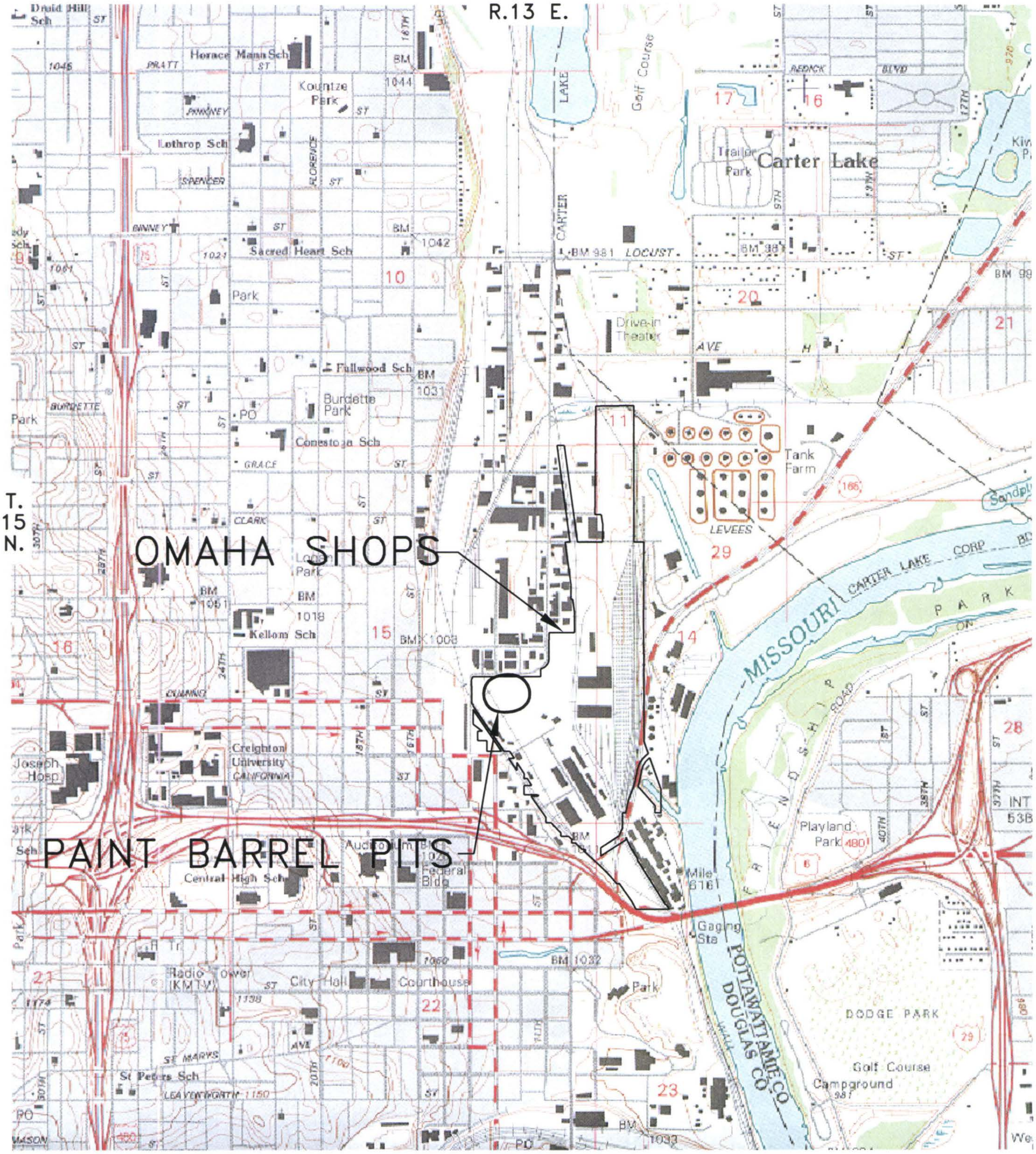
[1]Total metals include analysis of Target Analyte List (TAL) metals. In addition to Method 6010, includes 7060 (arsenic), 7421 (lead), 7740 (selenium), and 7470 (mercury).

TABLE 2

SAMPLE CONTAINERS, PRESERVATION, AND HOLDING TIMES UPRR OMAHA SHOPS FACILITY

ANALYTICAL METHOD	PARAMETER	CONTAINERS PER SAMPLE	MINIMUM SAMPLE SIZE	PRESERVATION	HOLDING TIME
Soil					
8260	VOC	Two 4-oz VOA jars with Teflon-lined lids	10 grams	4° C	14 days
6010/7000 series	Total Metals[1]	One 16-oz widemouth glass jar with Teflon-lined lid	10 grams	4° C	6 months

[1]Total metals include analysis of Target Analyte List (TAL) metals. In addition to Method 6010, includes 7060 (arsenic), 7421 (lead), 7740 (selenium), and 7470 (mercury).



QUADRANGLE LOCATION

BASE MAP SOURCE: USGS 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE MAP OF OMAHA NORTH, NE.-IA., 1994.

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OMAHA SHOPS LOCATION

UNION PACIFIC

OMAHA SHOPS
UNION PACIFIC RAILROAD COMPANY

URS Greiner Woodward Clyde

DRN BY DAP	DATE 12/15/99	PROJECT NO.	FIG. NO.
CHK'D BY .	REVISION .	45-091MC204.04	1

TP-01

SB-01

SB-02

APPROXIMATE LOCATION OF PAINT BARREL PITS

IZARD STREET

12TH STREET

LEGEND

- PREVIOUS TRENCH SOIL SAMPLE LOCATION
- PROPERTY LINE
- PREVIOUS SOIL BORING LOCATION

40 20 0 40

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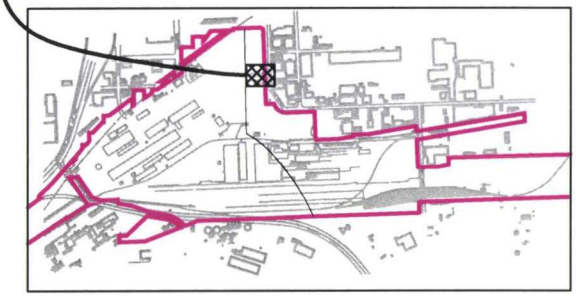
PAINT BARREL PITS AREA



KEY PLAN

SWMU 14-PAINT BARREL PITS SITE PLAN

UNION PACIFIC

OMAHA SHOPS
UNION PACIFIC RAILROAD COMPANY

URS Greiner Woodward Clyde

DRN BY DAP	DATE 12/15/99	PROJECT NO. 45-091MC204.04	FIG. NO. 2
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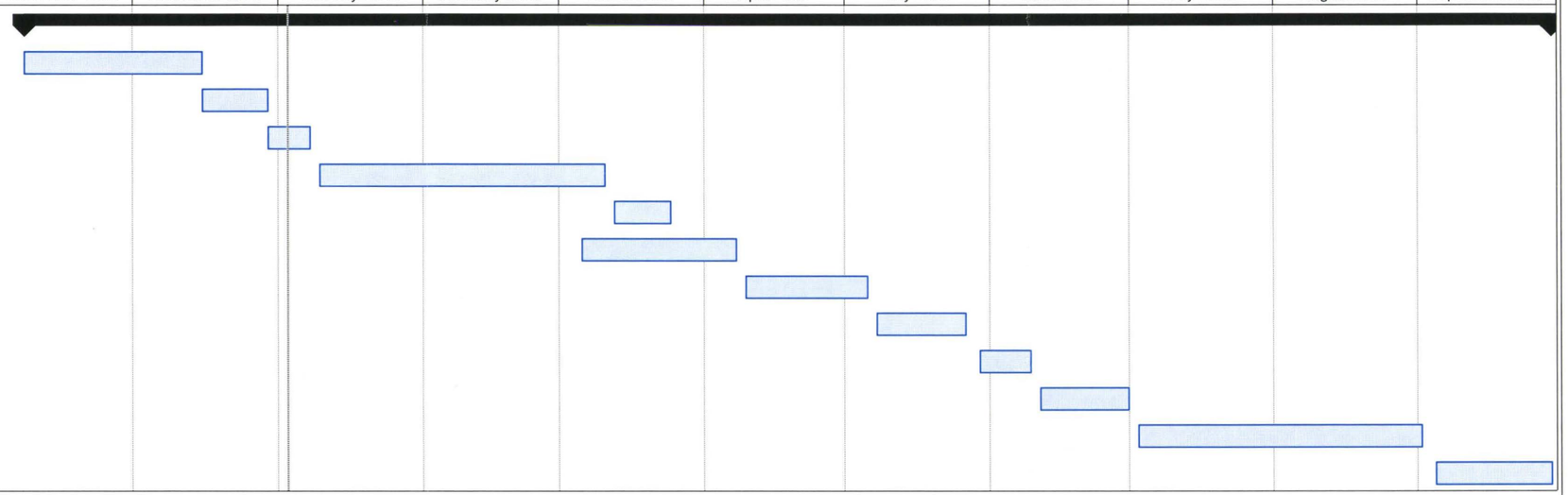
Xrefs: uprrpropline.DWG DRILLHOLES.DWG

FIGURE 3
UPRR OMAHA SHOPS
IM PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**Paint Barrel Pits**	**327 days**	**Mon 11/8/99**	**Fri 9/29/00**
2	Internal Draft Planning Memo	38 days	Mon 11/8/99	Wed 12/15/99
3	UPRR Review	14 days	Thu 12/16/99	Wed 12/29/99
4	Draft Planning Memorandum	9 days	Thu 12/30/99	Fri 1/7/00
5	EPA Review	61 days	Mon 1/10/00	Fri 3/10/00
6	Final Planning Memorandum	12 days	Mon 3/13/00	Fri 3/24/00
7	Procurement	33 days	Mon 3/6/00	Fri 4/7/00
8	Field Work	26 days	Mon 4/10/00	Fri 5/5/00
9	Internal Draft Report	19 days	Mon 5/8/00	Fri 5/26/00
10	UPRR Review	11 days	Tue 5/30/00	Fri 6/9/00
11	Draft Report	19 days	Mon 6/12/00	Fri 6/30/00
12	EPA Review	61 days	Mon 7/3/00	Fri 9/1/00
13	Final Report	25 days	Tue 9/5/00	Fri 9/29/00



Project: Pbpimf3
Date: Mon 1/3/00

Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary
Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks

SUBJECT: **Asbestos Area Interim Measures**

DATE: January 3, 2000

PROJECT: Omaha Shops RCRA Facility Investigation
Union Pacific Railroad Company
Omaha, Nebraska

This planning memorandum has been prepared for the Union Pacific Railroad Company (UPRR) by URS Greiner Woodward Clyde (URSGWC). The memorandum summarizes interim measures (IM) activities planned for the Asbestos Area located at the Omaha Shop facility. The Omaha Shops facility is located north of downtown Omaha near 9th and Webster Streets as shown on Figure 1. The location of the Asbestos Area is shown on Figure 2.

Field activities described in this memorandum are planned to start on or about April 1, 2000.

Purpose

The purpose of the planned IM activities is to reduce concentrations of potential contaminants in the soil at the referenced site, in anticipation of future development on the Omaha Shops property. The IM work is intended to remove the asbestos contaminated soil. The scope of planned activities is based on the findings of previous site investigations described in the RCRA Facility Investigation Report, Operable Unit No. 1, Omaha Shops, Union Pacific Railroad Company (URSGWC 1999).

Interim Measures Approach

Soil impacted by asbestos will be excavated and disposed, and the excavation backfilled with clean soil. Confirmation samples will be collected following the procedures described below. All field activities will be completed in accordance with the Omaha Shops Health and Safety Plan and Standard Operating Procedures in the Data Collection Quality Assurance Plan. The following actions will be taken as part of the IM for this site.

1. A utility clearance will be completed at each site prior to the start of the IM activities.

2. Field investigation activities will be completed following procedures specified in the Omaha Shops Health and Safety Plan. The fieldwork is expected to be completed using level D personal protective equipment. The Health and Safety Plan will be modified as necessary to address the activities described in this planning memorandum. Particular attention will be paid to safety procedures around heavy equipment.

3. The top 12-inches of soil will be excavated using a backhoe or other heavy equipment. The planned lateral limits of the excavation are based on the analytical results for subsurface soil samples collected in January 1999 (Figure 2).

4. Excavated soil will be loaded into lined trucks for transport to the designated disposal site.

5. Confirmation soil samples will be collected outside the lateral limits of the excavation and analyzed for asbestos. The confirmation sample analytical results will be used to verify that remaining soils do not exceed one percent asbestos.

6. Confirmation soil samples will be collected using a stainless-steel spoon. The sample material will be placed directly into a sample container provided by the laboratory.

7. Sampling equipment will be decontaminated prior to use at each sampling location using an Alconox water wash and clean water rinse.

8. Sample material will be placed in the appropriate container, labeled, packaged, and shipped to EMSL Analytical for asbestos analysis.

9. Sampling locations will be documented in the field logbook and the extent of any excavated areas will be marked and surveyed.

10. Excavated areas will be fenced off and left open following removal of the contaminated material.

11. If confirmation sample results exceed the one percent criteria, continue excavation activities followed by re-collection of confirmation samples outside the newly excavated area. Continue this procedure until all confirmation sample concentrations are below the one percent criteria.

12. Backfill the excavations with "clean" fill soils brought onto the site. The soils will be compacted in the excavations to minimize future settling.

Design Plans and Specifications

Design plans and specifications will be prepared prior to IM implementation. Specifications and/or drawing notes will include, but not be limited to, the following:

1. Before starting excavation activities, submit copies of all permits, licenses, and authorizations including, but not limited to, licenses of waste transporters and waste disposal facilities.
2. Prior to the start of excavation activities, communicate with the Owner and local representatives concerning the location of utilities including, but not limited to, oil, gas, electrical, telephone, communications, water, and sewer. The location and type of utilities that may be present in the area are not completely shown on the Drawings.
3. Install fencing or concrete barricades around excavation areas to prevent unauthorized access before starting excavation. Provide and maintain barricades with warning lights during excavation activities until excavation is backfilled.

4. Take all necessary precautions to assure no damage occurs to existing structures or appurtenances that may be affected by work activities. Any damage resulting from the Contractor's operations shall be repaired at no expense to the Owner.
5. Clear excavation sites of objectionable materials and debris. Designate noncontaminated material not salvaged for reuse on-site as spoiled and dispose of material in accordance with State and local requirements.
6. All excavation sideslopes must conform to safety requirements specified by Federal, State, and local government regulations.
7. Excavation includes removal and subsequent handling of materials excavated or otherwise handled in the performance of the work.
8. Contaminated soil will be loaded into lined dump trucks or roll-offs for transport to the designated disposal site.
9. Transport and dispose of waste in accordance with Federal, State, and local laws and regulations.
10. Contractor shall properly manifest each load of waste materials that is transported off site for disposal.
11. After excavation is complete to design limits, the Engineer will collect soil samples to verify that the performance standards have been achieved. Soil samples will be analyzed for asbestos.
12. The Engineer will direct additional excavation to remove contaminated soil, if necessary, based on results of confirmatory soil testing.
13. Upon notification from Engineer, immediately backfill the excavation(s).
14. Backfill the excavation using clean fill material from an off-site source.
15. Place backfill material into excavations in 6-inch thick (maximum) lifts.
16. Compact backfill as much as practical using heavy equipment.
17. At completion of work at each location, remove equipment, unused materials, temporary facilities, debris, and miscellaneous items resulting from or used during construction. Restore site, as nearly as possible, to original conditions.
18. Submit copies of completed manifests and certificates of disposal indicating quantities of the various wastes and materials accepted for disposal.

Operation and Maintenance Plan

An operation and maintenance plan is not anticipated since the materials will be removed for off-site disposal and the excavation filled with clean material.

Interim Measures Implementation Schedule

The anticipated IM schedule is shown on Figure 3.

TABLE 1

ESTIMATED ASBESTOS AREA SAMPLING BREAKDOWN
UPRR OMAHA SHOPS FACILITY

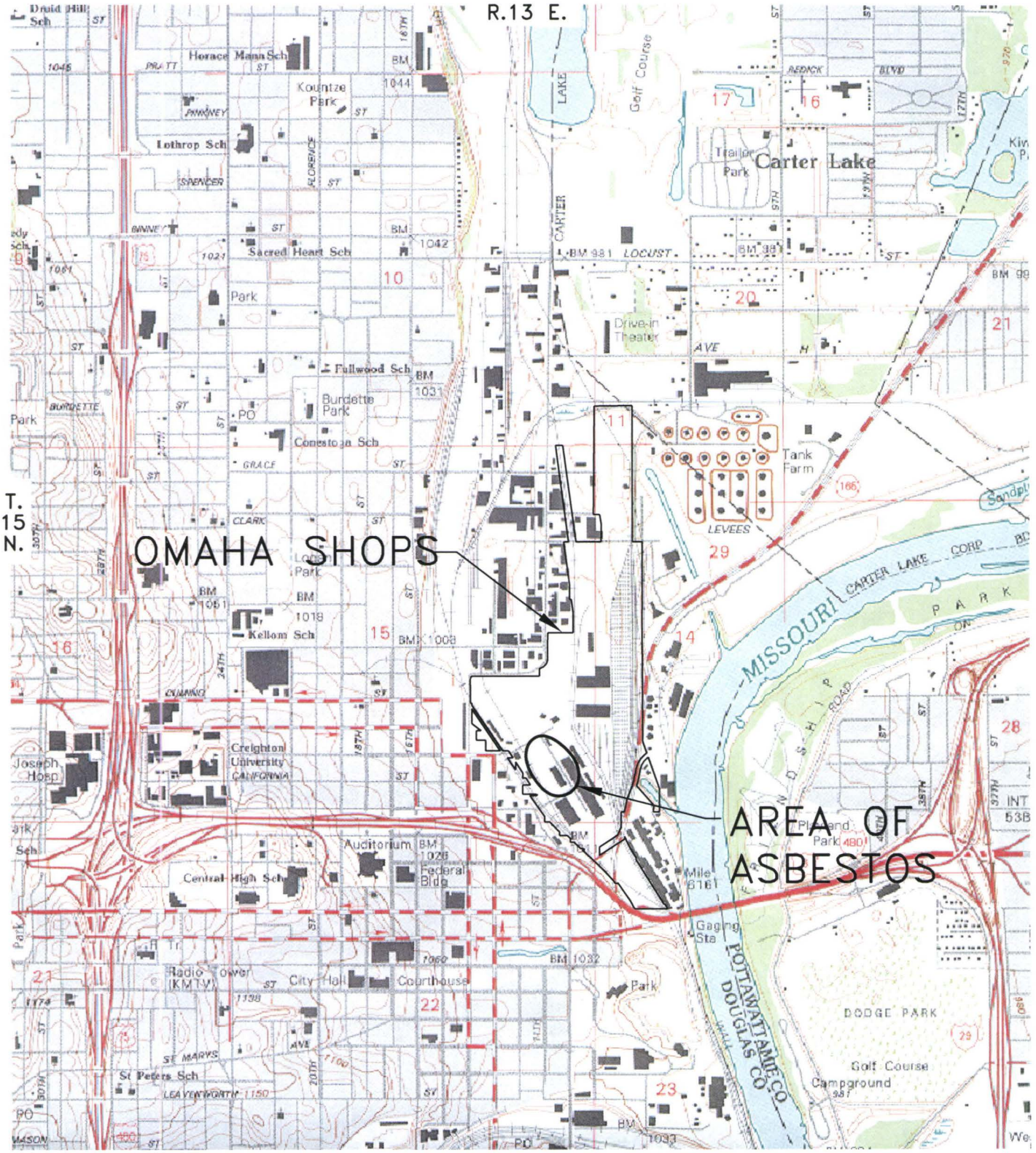
ANALYTICAL METHOD	PARAMETER	NO. OF FIELD SAMPLES	NO. OF FIELD REPLICATES	NO. OF MS/MSD SAMPLES	TOTAL NO. OF SAMPLES
Soil					
EPA 600/R-93/116 Method	Asbestos	10	1	NA/NA	11

NA = Not Applicable

TABLE 2

SAMPLE CONTAINERS, PRESERVATION, AND HOLDING TIMES
UPRR OMAHA SHOPS FACILITY

ANALYTICAL METHOD	PARAMETER	CONTAINERS PER SAMPLE	MINIMUM SAMPLE SIZE	PRESERVATION	HOLDING TIME
Soil					
EPA 600/R-93/116 Method	Asbestos	One Ziploc type 2" x 2" plastic bag	10 grams	None	None



NEBRASKA

QUADRANGLE LOCATION

BASE MAP SOURCE: USGS 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE MAP OF OMAHA NORTH, NE.–IA., 1994.

N

2000 1000 0 2000

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OMAHA SHOPS LOCATION

OMAHA SHOPS
UNION PACIFIC RAILROAD COMPANY

URS Greiner Woodward Clyde

DRN BY DAP	DATE 12/15/99	PROJECT NO. 45-091MC204.04	FIG. NO. 1
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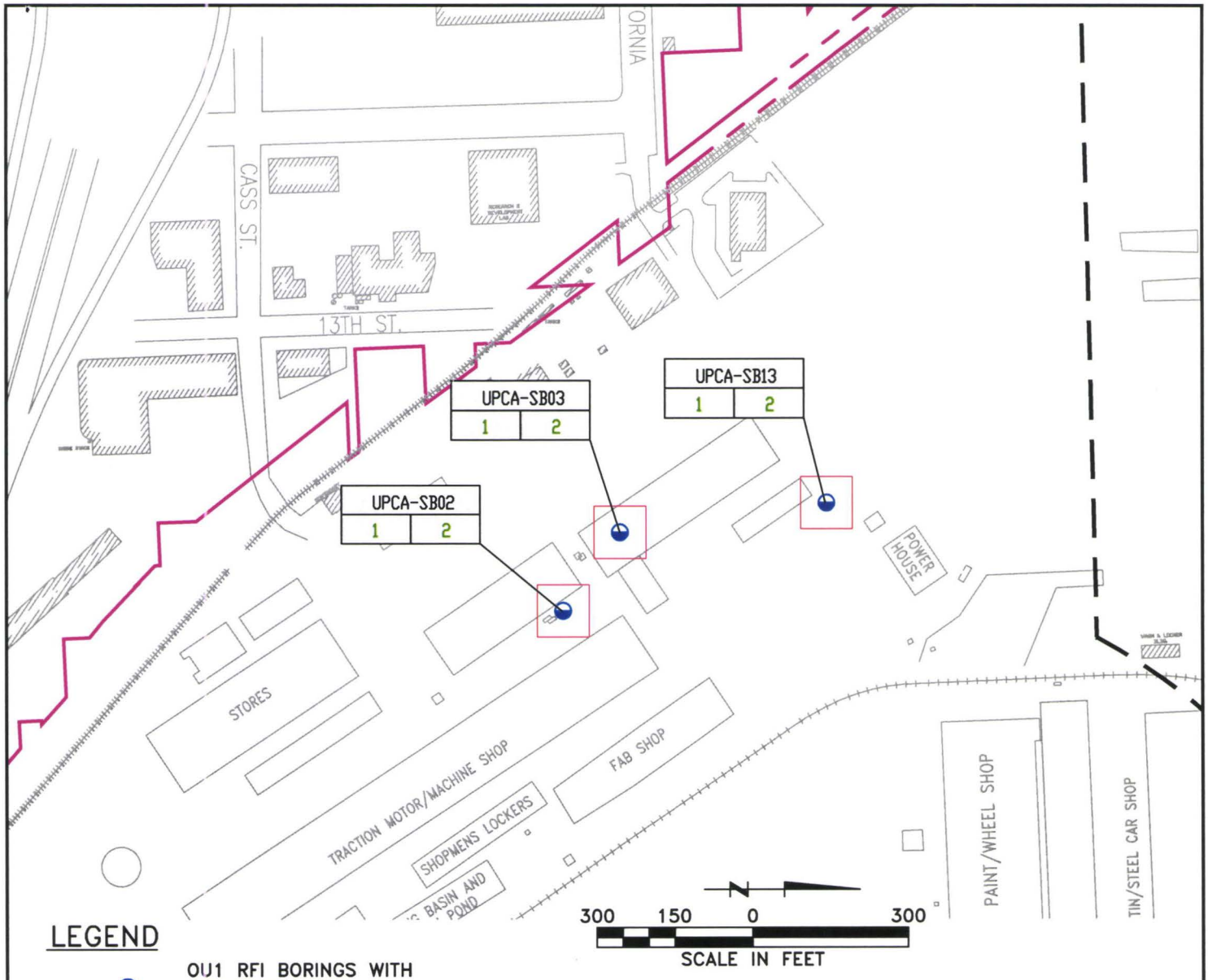
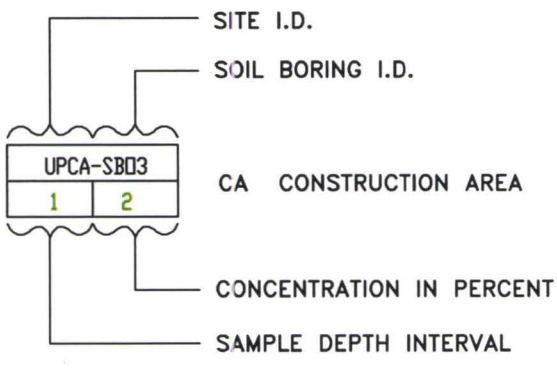
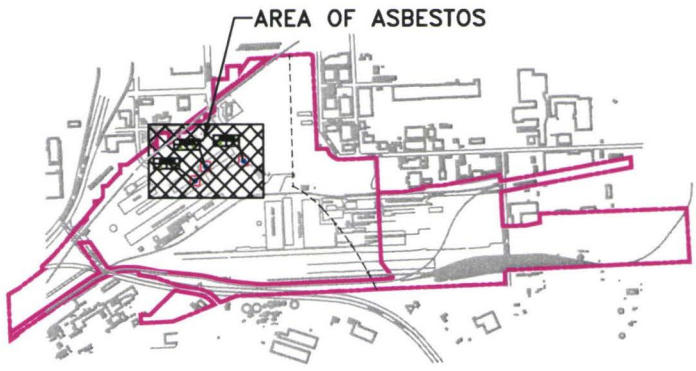


LEGEND

- OU1 RFI BORINGS WITH ASBESTOS DETECTED
- STRUCTURES
- PROPERTY LINE
- OU1 BOUNDARY
- LIMITS OF EXCAVATION





KEY MAP

PROPOSED EXCAVATION LIMITS FOR ASBESTOS IN SOIL

OMAHA SHOPS
UNION PACIFIC RAILROAD COMPANY

URS Greiner Woodward Clyde

DRN BY	TSSM	DATE	10/06/99	PROJECT NO.	FIG. NO.
CHK'D BY	JAW	REVISION	0	45-091MC204.04	2

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Drawing: T:\91MC204\T2100\HIT_T.DWG (DAP)
Xrefs: planar property line.DWG DRILLHOLES.DWG uprrpropline.DWG BASE.DWG

FIGURE 3
UPRR OMAHA SHOPS
IM PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**Asbestos Removal**	**306 days**	**Mon 11/8/99**	**Fri 9/8/00**
2	Internal Draft Planning Memo	38 days	Mon 11/8/99	Wed 12/15/99
3	UPRR Review	14 days	Thu 12/16/99	Wed 12/29/99
4	DraftPlanning Memorandum	9 days	Thu 12/30/99	Fri 1/7/00
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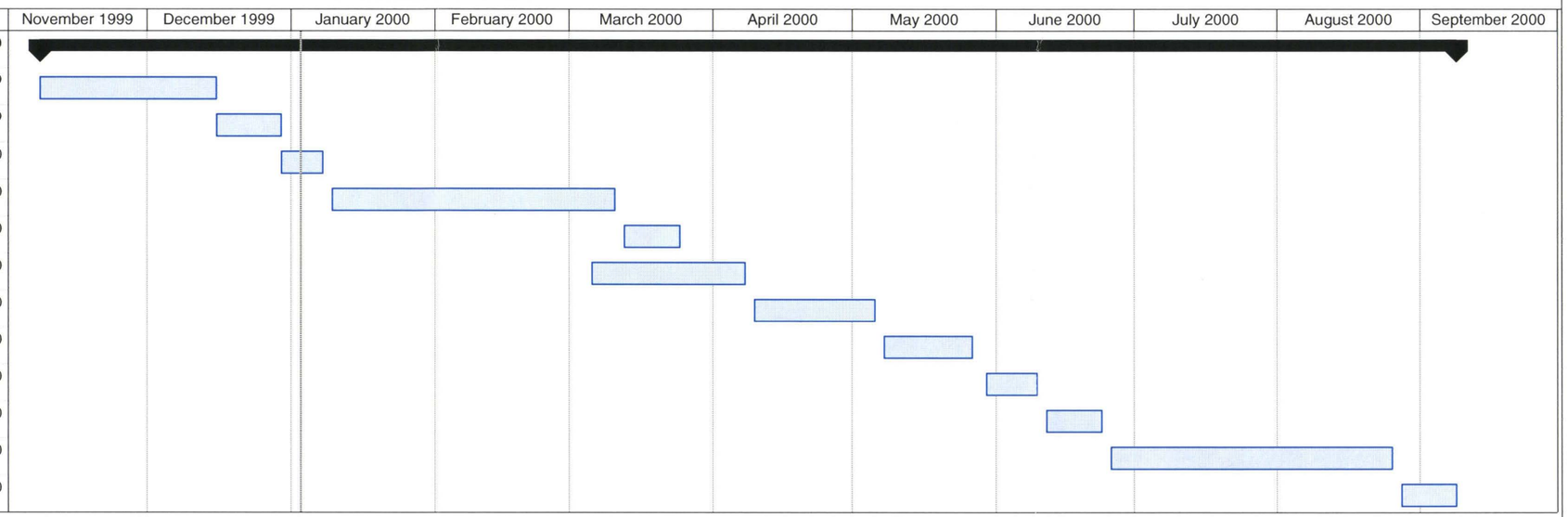
11	Draft Report	12 days	Mon 6/12/00	Fri 6/23/00
12	EPA Review	61 days	Mon 6/26/00	Fri 8/25/00
13	Final Report	12 days	Mon 8/28/00	Fri 9/8/00



Project: Asbimf3
Date: Mon 1/3/00

Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary
Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks